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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/780,846
Filing Date: February 18, 2004
Appellant(s): BROERING ET AL.

David K. Mattheis
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 23, 2007 appealing from the Office action mailed May 23, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference

characters. The brief is deficient because it hints that the claimed invention is limited to "a portion of a sheet is overlapped upon itself, as in a c folded sheet" however the claims merely recite a step of "introducing a sheet material having at least one overlapped portion" which while it includes a c folded sheet is not limited to a c folded sheet. Instead, the sheet material having at least one overlapped portion includes use of pinching rolls which "collapse the air bubble and compress the walls of tube 51 together into a flattened continuous web 53 of sheet material 52 having at least one overlapped portion." (paragraph [0014] of the specification). As such the introduction of a sheet material having at least one overlapped portion clearly was inclusive of a tube sheet which was flattened upon itself to form a continuous sheet of web material having at least one overlapped portion.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

(A) List of Evidence Relied Upon

1,301,198	Bustin (G.B.)	12-1972
5,709,069	Cronauer	1-1998
2,615,375	Rowe et al	10-1952

4,481,006	LaFleur et al	11-1984
5,956,929	Yisha et al	9-1999
6,446,684	Hiramoto et al	9-2002
5,845,463	Henaus	12-1998
5,564,252	Adelmann	10-1996
5,279,095	Muller	1-1994
6,394,652	Meyer et al	5-2002

(B) Brief Description of Evidence Relied Upon

Bustin taught that it was known to convert a tube film into a bag assembly which included the steps of introducing a tubular sheet material having overlapped portions into a nip between embossing rolls which formed the overlapped portions of sheet material into a strainable network having first and second regions where the first regions are undeformed and the second regions are formed into disengageable pleat elements and disengaging the pleat elements with a disengaging means which included introduction of air between the overlapped portions.

Cronauer suggested that those skilled in the art of bag manufacture in a plastic bag converting operation would have known that an air knife would have been a suitable means useful for introduction of air between overlapped plastic layers in order to facilitate separation of the layers (disengaging the same).

Rowe et al suggested in the art of making a bag assembly that suitable means for disengaging an overlapped bag material having pleats therein via a variety of means including a static bar opening or a dynamic bar opening.

LaFleur et al suggested in the art of making a bag assembly that suitable means for disengaging an overlapped bag material having pleats therein via a dynamic bar opening.

Yisha et al suggested that it was known in the art of bag manufacture/converting to open the bag with a stationary bar assembly.

Each one of **Hiramoto et al**, **Henaux**, **Adelmann** and **Muller** suggested that it was known to open up an overlapped plastic assembly in a plastic bag converting operation using a vacuum/suction system.

Meyer et al suggested that in making a plastic bag it was well known at the time the invention was made to overlap portions of a sheet material and pass the same through a process whereby the overlapped portion of sheet material was formed into a strainable network including a plurality of regions which were undeformed and a plurality of second regions formed into pleat elements wherein the sheet material was provided with an elastic-like behavior suitable for flexible bag manufacture.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3, 12, 14-16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Bustin.

With respect to claim 1, Bustin teaches a method of making an article (flexible bag) having elastic-like behavior by introducing a sheet material 10 having at least one overlapped portion (it should be noted that the overlapped portion was formed by the flattening of the extruded tube sheet and thus the opposed sides of the tube sheet were brought into overlapping contact), forming said overlapped portion of sheet material into a strainable network including a plurality of first regions and a plurality of second regions, said first regions being substantially un-deformed and said second regions being formed into disengageable pleat elements (sheet passes between embossing rollers 25, 26 to form deformations/pleats), and disengaging said pleat elements using a disengaging means (introduces air between overlapped portion of sheet to disengage pleat elements). See Figures 1-6, p. 1 lines 11-18, p. 2 lines 5-15 and 115-117, p. 3 lines 10-40.

It should be noted that an article of the present invention has elastic-like behavior' because of the presence of the strainable network (see present specification at section [0022] on p. 11). The strainable network, which comprises a plurality of deformations formed in the plastic sheet material (i.e. polyethylene), is formed by feeding the sheet material through a nip formed by a toothed roll and an opposing grooved roll (see present specification at sections [0019-0020]). Furthermore, the present specification incorporates commonly owned US PAT 6,394,652 by reference for its teaching of a sheet material having a strainable network that can be used with the present invention (see present specification at section [0024]) - it being noted that the '652 PAT forms the deformations of the strainable network by passing the sheet

material through a nip formed by embossing rolls (see '652 PAT at column 2, lines 39-43 and column 3, lines 50-56 and column 4, lines 57-59).

Therefore, since Bustin forms a plurality of deformations in his plastic sheet material (i.e. polyethylene) by passing the same through a nip formed by a toothed embossing roll and an opposing grooved roll (p. 4, lines 25-31), one would readily appreciate that the deformations of Bustin form a 'strainable network' in the sheet material and that this strainable network would impart 'elastic-like behavior' to the article.

Regarding claim 3, Bustin teaches overlapping one portion of sheet material over another portion of sheet material (Figure 6).

Regarding claim 12, Bustin teaches winding the sheet of material onto a roll (Figure 6; p. 3 lines 38-39).

Regarding claim 14, Bustin teaches unwinding a continuous web of sheet material from a roll (Figure 5; p. 3 lines 127-130).

Regarding claim 15, Bustin teaches such (Figure 6; p. 3 lines 10-13).

Regarding claim 16, Bustin teaches forming flexible bags from the sheet material (Figure 5; p. 1 lines 15-18).

Regarding claim 18, Bustin teaches such (p. 3 lines 35-38 and 125-126).

Claims 2, 4, 20, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bustin as applied above further in view of Cronauer.

Appellant is referred to the complete discussion of Bustin above for the discussion of the complete teachings found in the reference. Regarding claim 2, Bustin

teaches disengaging the pleat elements by inflation (p. 3 lines 30- 33) but it is unclear as to how Bustin introduces the air between the pleats. It would have been obvious to use an air knife to introduce the air because such is used in the art to deliver air, which separates the front and back walls of a flexible bag to thereby open the same, as by Cronauer (column 1, lines 14-15; column 2, lines 54-57; column 5, lines 6-9). Use of a conventional means in the art to introduce air would have been perceived by those skilled in the art as useful means to introduce air in the processing in accordance with Bustin.

Regarding claim 4, Bustin teaches such.

Regarding claim 10, Bustin teaches forming the pleats using embossing rollers 25, 26 (p. 3 lines 71-93).

Regarding claim 20, all the limitations were addressed with respect to claims 1 and 2.

Claims 2, 4-11, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bustin as applied above with respect to claim 1 further in view of any one of Rowe et al, LaFleur et al or Yisha et al or in view of the collective teachings of Hiramoto et al, Henaux, Adelman, and Muller.

Regarding claims 2, 5-9 and 11, one of ordinary skill in the art reading Bustin as a whole would have readily appreciated that the reference is not concerned with a particular method/device for disengaging the pleats. The reference clearly desired that the pleats be disengaged but the specific mechanism used to do the same was of no import to Bustin. Therefore, it would have been obvious to one of ordinary skill in the art

to use other methods/devices, such as those being claimed by Appellant, as an alternative to inflation since such alternatives are well known in the flexible bag art and only the expected results would have been achieved: Rowe teaches making flexible bag where pleats formed in bag and then pleats separated by variety of methods/devices including inflation (Figure 1; column 3, lines 35-36), a static opening bar (Figure 5; column 4, lines 30-34), and a dynamic opening bar (Figures 9-13 and 16; column 4, lines 60-75; column 5, lines 43-47 and 55-67); LaFleur teaches opening a flexible bag using a dynamic opening bar (Figure 1; column 1, lines 4-12; column 2, line 48 – column 3, line 3); Yisha teaches opening a flexible bag using a stationary opening bar (Figures 1-2; abstract; column 2, lines 48-65); collective teachings of Hiramoto (column 1, lines 8-15; column 3, lines 39-43), Henaux (Figure 1; column 2, lines 22-24), Adelman (column 5, lines 50-65) and Muller (abstract; column 1, lines 14-16; column 2, lines 6-40; column 3, lines 38-42) teach opening a flexible bag using suction/vacuum. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an alternative means to air inflation to facilitate the separation (disengaging) of the plastic film material in the plastic bag converting process of Bustin such as the use of dynamic or static bars or vacuum/ suction mechanisms as such were art recognized equivalents in such converting operations as evidenced by any one of Rowe et al, LaFleur et al or Yisha et al or the collective teachings of Hiramoto et al, Henaux, Adelman, and Muller.

Regarding claim 17, Bustin teaches sealing at least one edge of the flexible bag (p. 3 lines 35-36). It would have been obvious to sever the sheet material across a

width of the sealed edge to separate the sheet material into individual flexible bags because such is known in the art, as taught by Yisha (column 4, lines 34-40; column 5, lines 40-45).

Regarding claim 19, it would have been obvious to interleave the severed (claim 17) or perforated (claim 18) bags of Bustin because such is well known and conventional in the flexible bag art when storing/shipping the bags.

Regarding claims 4, 10 and 20, please see the discussions above.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bustin as applied above to claim 1 further in view of Meyer et al.

Regarding claim 13, it would have been obvious to incorporate a closure means into the sheet material of Bustin because such is known in the flexible bag making art, as taught by Meyer (column 2, lines 32-35; column 11, lines 28-38). The addition of a closure means in the process would have been performed in the converting operation of Bustin in order to provide the plastic bags therein with a suitable closure means and thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a means for applying a closure within the converting system of Bustin as such was commonplace in bag converting operations as evidenced by Meyer et al.

Claims 1, 3, 12-16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Bustin or alternatively Bustin in view of Meyer et al.

With respect to claim 1, Meyer teaches a method of making an article (flexible bag) having elastic-like behavior (column 2, lines 49-55; column 3, lines 50-56) by introducing a sheet material (i.e. polyethylene; column 11, line 2) having at least one overlapped portion (column 2, lines 16-29; column 9, lines 6-9) and forming said overlapped portion of sheet material into a strainable network including a plurality of first regions 50 and a plurality of second regions 40, said first regions being substantially undeformed and said second regions being formed into pleat elements (Figure 1; column 2, lines 39-43; column 3, lines 50-56).

Since Meyer forms his strainable network of undeformed regions and pleat elements by passing the sheet between embossing rollers while the sheet is folded/overlapped (column 4, lines 57-65; column 2, lines 17-29; column 9, lines 6-9), one would readily appreciate that one layer will engage with the other layer in the areas where the pleat elements are formed (see section [0003] of Admitted Prior Art in present specification). However, it is unclear as to whether the reference teaches disengaging the pleat elements using a disengaging means.

It is known in the flexible bag art to introduce a sheet material having at least one overlapped portion, form said overlapped portion of sheet material into a network including a plurality of undeformed regions and disengageable pleat elements by passing the sheet between embossing rollers, and then disengage the pleat elements using a disengaging means, as taught by Bustin (Figures 1-6, p. 1 lines 11-18, p. 2 lines 5-15 and 115-117, p. 3 lines 10-40). The disengaging of the sheet material was

performed in order to facilitate bag formation wherein the bag was capable of being opened subsequent to the converting operation.

Therefore, it would have been obvious to one of ordinary skill in the art to disengage the pleat elements of Meyer using a disengaging means because such is known in the flexible bag art, as taught by Bustin, where this allows for separation of the walls of the flexible bag thereby creating the open space needed to hold contents within the bag.

Alternatively, with respect to claim 1, and if it is not taken that Bustin teaches the pleat elements forming a strainable network and the flexible bag having elastic-like behavior, it would have been obvious to one of ordinary skill in the art to carry out the embossing of Bustin such that the un-deformed regions and disengageable pleat elements form a strainable network that imparts elastic-like behavior to the flexible bag because such is known in the art, as taught by Meyer, where elastic-like behavior allows the bag to expand in response to forces exerted by contents within the bag to provide an increase in volume so that the bag can accommodate the contents placed therein (Meyer; column 1, lines 48-50; column 3, lines 50-55; column 3, lines 50-56). Note that the embossing performed by Meyer clearly formed the strained film which was capable of being elastic-like which made it more suitable as a film material for a bag.

Regarding claim 3, Meyer teaches this (column 2, lines 16-30; column 9, lines 5-9). Regarding claim 12, Meyer teaches this (Figure 3). Regarding claim 13, Meyer teaches this (column 11, lines 28-38). Regarding claim 14, Meyer in view of Bustin teaches this (Bustin at p. 3, lines 12-130). Regarding claim 15, Meyer in view of Bustin

teaches this (Bustin at p. 3, lines 10-13). Regarding claim 16, Meyer teaches this.

Regarding claim 18, Meyer in view of Bustin teaches this (Bustin at p. 3, lines 35-38 and 125-126). Regarding claim 19, it would have been obvious to interleave the bags of Meyer because such is well known and conventional in the flexible bag art when storing/shipping the bags.

Claims 2, 4, 10, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Bustin or alternative Bustin in view of Meyer et al for the reasons as discussed above with regard to claim 1 further in view of Cronauer.

Appellant is referred to the complete discussion of Bustin and Meyer et al above for the discussion of the complete teachings found in the references. Regarding claim 2, Bustin teaches disengaging the pleat elements by inflation (p. 3 lines 30- 33) but it is unclear as to how Bustin introduces the air between the pleats. Note that one would have employed a disengaging means in Meyer et al in light of the teachings of Bustin. It would have been obvious to use an air knife to introduce the air because such is used in the art to deliver air, which separates the front and back walls of a flexible bag to thereby open the same, as by Cronauer (column 1, lines 14-15; column 2, lines 54-57; column 5, lines 6-9). Use of a conventional means in the art to introduce air would have been perceived by those skilled in the art as useful means to introduce air in the processing in accordance with Bustin.

Regarding claim 4, Bustin teaches such.

Regarding claim 10, Bustin teaches forming the pleats using embossing rollers 25, 26 (p. 3 lines 71-93).

Regarding claim 20, all the limitations were addressed with respect to claims 1 and 2.

Claims 2, 4-9, 10, 11, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Bustin or alternatively Bustin in view of Meyer et al as applied to claim 1 above further in view of any one of Rowe et al, LaFleur et al or Yisha et al or in view of the collective teachings of Hiramoto et al, Henaux, Adelman, and Muller.

Regarding claims 2, 5-9 and 11, one of ordinary skill in the art reading Bustin as a whole would have readily appreciated that the reference is not concerned with a particular method/device for disengaging the pleats. The reference clearly desired that the pleats be disengaged but the specific mechanism used to do the same was of no import to Bustin. Therefore, it would have been obvious to one of ordinary skill in the art to use other methods/devices, such as those being claimed by Appellant, as an alternative to inflation since such alternatives are well known in the flexible bag art and only the expected results would have been achieved: Rowe teaches making flexible bag where pleats formed in bag and then pleats separated by variety of methods/devices including inflation (Figure 1; column 3, lines 35-36), a static opening bar (Figure 5; column 4, lines 30-34), and a dynamic opening bar (Figures 9-13 and 16; column 4, lines 60-75; column 5, lines 43-47 and 55-67); LaFleur teaches opening a flexible bag using a dynamic opening bar (Figure 1; column 1, lines 4-12; column 2, line 48 – column 3, line 3); Yisha teaches opening a flexible bag using a stationary opening bar (Figures 1-2; abstract; column 2, lines 48-65); collective teachings of Hiramoto (column

1, lines 8-15; column 3, lines 39-43), Henaux (Figure 1; column 2, lines 22-24), Adelman (column 5, lines 50-65) and Muller (abstract; column 1, lines 14-16; column 2, lines 6-40; column 3, lines 38-42) teach opening a flexible bag using suction/vacuum. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an alternative means to air inflation to facilitate the separation (disengaging) of the plastic film material in the plastic bag converting process of Bustin such as the use of dynamic or static bars or vacuum/ suction mechanisms as such were art recognized equivalents in such converting operations as evidenced by any one of Rowe et al, LaFleur et al or Yisha et al or the collective teachings of Hiramoto et al, Henaux, Adelman, and Muller.

Regarding claim 17, Bustin teaches sealing at least one edge of the flexible bag (p. 3 lines 35-36). It would have been obvious to sever the sheet material across a width of the sealed edge to separate the sheet material into individual flexible bags because such is known in the art, as taught by Yisha (column 4, lines 34-40; column 5, lines 40-45).

Regarding claim 19, it would have been obvious to interleave the severed (claim 17) or perforated (claim 18) bags of Bustin because such is well known and conventional in the flexible bag art when storing/shipping the bags.

Regarding claims 4, 10 and 20, please see the discussions above.

(10) Response to Argument

Regarding the rejection under 35 USC 102(b) and the applicability of Bustin to the claimed invention, the appellant has the following two arguments: (1) the reference

to Bustin does not provide a step of "introducing a sheet material having at least one overlapped portion" because the reference is converting a tubular sheet into a bag and not a planar sheet material; (2) Bustin does not teach "forming said overlapped portion of sheet material into a strainable network including a plurality of first regions and a plurality of second regions, said first regions being substantially undeformed and said second regions being formed into disengageable pleat elements" because there is no express mention in Bustin that a "strainable network" was formed in the embossing operation described therein and there is no support for the contention that all embossed films are necessarily strainable in nature (appellant also asserts that there is no separation of a sheet material, presumably inferring that the reference does not teach a disengaging means despite the clear teaching that the overlapped embossed structure was disengaged at page 2, lines 10-13, for example). These arguments have not been found to be persuasive for the reasons discussed in detail below.

Regarding the first argument, the appellant is advised that the reference to Bustin clearly taught that one extrude a tubular sheet of plastic material and subsequent to the cooling of the extruded film, the film was passed through pinch rollers wherein the tubular film was flattened. Such flattening of a tube would have clearly "introduced a sheet material having at least one overlapped portion" as opposite sides of the tubular film were brought together into overlapped relation. Appellant is advised that the claims as presented do not exclude introducing the film as a flattened tubular film. Any argument that the sheet is "c folded" or in an over folded condition wherein initially the sheet was flat and then it was over folded is simply not commensurate in scope with the

claimed invention. As noted above (see the summary of the claimed invention), the appellant's own specification expressly stated that a tubular film which was flattened would have satisfied the requirements of introducing "a sheet material having at least one overlapped portion", see paragraph 14 of the specification which states:

"A raw plastic material can be formed by blowing or casting a continuous web 53 of sheet material 52 as is well known in the art. For example, a continuous web 53 can be blown from a raw stock of plastic material introduced in pellet form into an extruder 120, from which a tubular structure such as a tube 51 of thin plastic material is extruded through tubular die 121. Tube 51 is inflated by blowing or capturing an air bubble within tube 51. Typically, this tube 51 is cooled as it rises. Tube 51 can be pressed together through a set of pinching rollers 122. Pinching rollers 122 collapse the air bubble and compress the walls of tube 51 together into a flattened continuous web 53 of sheet material 52 having at least one overlapped portion." (emphasis added)

Clearly. Formation of a tube and the collapsing of the so formed tube upon itself resulted in a sheet material having at least one overlapping portion. While appellant may further process this flattened tube via a cutting or slitting operation so that the material introduced into the embossing roller nip was in a c folded condition, the claims as presented do NOT require the same and thus the reference to Bustin is deemed to satisfy the requirements of introducing a sheet material having at least one overlapped portion. It should additionally be noted regarding this posit taken by appellant that the mechanisms which were used to separate a c folded overlapped sheet of plastic bag material used in the converting operation were irrelevant, unusable, and immaterial to mechanisms used to open a tubular film up from an overlapped state that appellant's own specification again contradicts the appellant's position. Namely appellant is referred to paragraph [0004] of the specification where it states that:

"It is frequently difficult to separate the overlaying or overlapping layers of film in which deformations have been formed which can cause problems during subsequent processing. This problem is even more acute when the continuous web from which the flexible bags are made is not in a tubular configuration that can be easily inflated using air."(emphasis added)

Clearly then, those techniques which were utilized to open non-tubular arrangements of the overlapped sheet material would have not only been considered relevant to the tubular configuration but would have been expected to work more effectively upon the tubular sheet material in disengaging the overlapped sheets.

Regarding the appellant's second argument, the appellant is advised as repeatedly stressed by the Office, the reference to Bustin employs a embossing roll arrangement wherein first regions of the overlapped material are left substantially undeformed while second regions of the overlapped sheet material are formed into disengageable pleat elements. The reference did not use the express language that the overlapped sheet material was formed into a "strainable network". However, this has been found to be an intrinsic result of processing the overlapped sheet material with an embossing roller arrangement wherein one formed regions which were undeformed and others which included disengageable pleats therein. As described on page 11 of the specification in paragraph [0022], a:

""strainable network" refers to an interconnected and interrelated plurality of first regions 64 and second regions 66 which enable the elastic-like behavior."

The strainable network, which comprises a plurality of deformations formed in the plastic sheet material (i.e. polyethylene), is formed by feeding the sheet material

through a nip formed by a toothed roll and an opposing grooved roll (see present specification at sections [0019-0020]). Furthermore, the present specification incorporates commonly owned US PAT 6,394,652 (Meyer, discussed above) by reference for its teaching of a sheet material having a strainable network that can be used with the present invention (see present specification at section [0024]) - it being noted that Meyer forms the deformations of the strainable network by passing the sheet material through a nip formed by embossing rolls (see Meyer at column 2, lines 39-43 and column 3, lines 50-56 and column 4, lines 57-59).

Therefore, since Bustin forms a plurality of deformations in his plastic sheet material (i.e. polyethylene) by passing the same through a nip formed by a toothed embossing roll and an opposing grooved roll (p. 4, lines 25-31), one would readily appreciate that the deformations of Bustin form a "strainable network" in the sheet material and that this strainable network would impart "elastic-like behavior" to the article. It should be noted that the flexible material of Bustin was used to manufacture a bag (which is what appellant is manufacturing). One would have expected that processing the plastic overlapped sheet material in a like manner to that claimed would have intrinsically resulted in the formation of an assembly having a "strainable network" which had elastic-like behavior. Therefore the teachings of Bustin are believed to anticipate the claimed invention as the reference taught the steps of overlapping a sheet material (by flattening the tubular sheet) and forming a strainable network (by processing the material in the fashion claimed including passing the assembly through an embossing nip).

Regarding the arguments relating to claims 2, 4, 10, and 20 and the combined teachings of Bustin and Cronauer, the appellant argues initially that these claims are allowable because they depend from an allowable independent claim. However, as addressed above, claim 1 (from which 2, 4 and 10 depend) has not been found to be allowable in light of the teachings to Bustin. The appellant also argues that the examiner has failed to establish a prima facie case because the references failed to teach separation of a sheet material overlapped upon itself. This has not been found to be persuasive as discussed above at length, the reference to Bustin taught that one skilled in the art would have introduced a sheet material having at least one overlapped region via the collapsing of the tubular sheet material disclosed therein. The appellant argues that Bustin relates to a continuous tube and while this is correct, there is nothing in the claims which excluded use of the same. As addressed above, the claims are not commensurate in scope with appellant's arguments regarding the use of a c folded sheet and the claims do not recite a step of slitting the tube after formation to form the c folded material as described by appellant's own specification. Appellant's argument in this regard has not been found to be persuasive as Bustin taught the overlapped arrangement of sheet material within the scope of the claimed limitations (and as described by appellant's own specification). Cronauer does relate to bag manufacture, as does Bustin. The reference provided an air knife to separate the overlapped layers of the plastic bag material. As noted above, inclusion of a suitable means to introduce the air into the overlapped material in Bustin clearly would have included conventional means such as the air knife of Cronauer. The appellant does not address the teaching,

suggestion or motivation to make the combination but rather states that the prima facie case has not been established because the references failed to teach the inclusion of a step of introducing a sheet material having at least one overlapped portion. Such was clearly taught by Bustin and for this reason, the rejection of claims 2, 4, 10, and 20 under 35 USC 103 should be sustained.

The appellant addresses the rejection of claims 2, 4-11, 17, 19 and 20 (and the combination of Bustin with any one of Rowe et al, LaFleur et al or Yisha et al or in view of the collective teachings of Hiramoto et al, Henaux, Adelman, and Muller) and again states that: (1) those claims which depend from an allowable independent claim are also allowable, and; (2) no prima facie case has been established because each and every limitation of the claims has not been found in the prior art, namely there is no teaching of overlapping a sheet material. However, as addressed above, claim 1 (from which 2, 4-11, 17, and 19 depend) has not been found to be allowable in light of the teachings to Bustin. The appellant argues that the examiner has failed to establish a prima facie case because the references failed to teach separation of a sheet material overlapped upon itself. This has not been found to be persuasive as discussed above at length, the reference to Bustin taught that one skilled in the art would have introduced a sheet material having at least one overlapped region via the collapsing of the tubular sheet material disclosed therein. The appellant argues that Bustin relates to a continuous tube and while this is correct, there is nothing in the claims which excluded use of the same. As addressed above, the claims are not commensurate in scope with appellant's arguments regarding the use of a c folded sheet and the claims do not recite

a step of slitting the tube after formation to form the c folded material as described by appellant's own specification. Appellant's argument in this regard has not been found to be persuasive as Bustin taught the overlapped arrangement of sheet material within the scope of the claimed limitations (and as described by appellant's own specification).

Thus the prior art did teach each and every feature of the claimed invention. It should be noted that appellant did not address the various disengaging means described in the references to Rowe et al, LaFleur et al, Yisha et al , Hiramoto et al, Henaux, Adelman, and Muller. As such, appellant has conceded that it would have been within the purview of the ordinary artisan to utilize the various disengaging means of these references in the operation of Bustin in order to disengage the engaged portions of material. It should be noted as addressed above that those techniques used for an overlapped sheet of material would have been useful for the overlapped tube sheet as it was recognized to be more difficult to open the folded sheet material rather than the tube sheet as noted by appellant in the specification.

Regarding claim 13 and the rejection under 35 USC 103 of the claim in view of the teachings of Bustin in view of Meyer et al, the appellant again notes that because the independent claim is allowable that the dependent claim is allowable and additionally notes that a prima facie case has not been established because one cannot combine the techniques used to disengage a tube with techniques used to disengage a folded over sheet material. As noted repeatedly, claim 1 has not been found to be allowable over the prior art of record and thus dependent claim 13 is not afforded allowability merely because it depends from an allowable independent claim. It should

additionally be noted regarding this position taken by appellant that the mechanisms which were used to separate a c folded overlapped sheet of plastic bag material used in the converting operation were irrelevant, unusable, and immaterial to mechanisms used to open a tubular film up from an overlapped state that appellant's own specification again contradicts the appellant's position. Namely appellant is referred to paragraph [0004] of the specification where it states that:

"It is frequently difficult to separate the overlaying or overlapping layers of film in which deformations have been formed which can cause problems during subsequent processing. This problem is even more acute when the continuous web from which the flexible bags are made is not in a tubular configuration that can be easily inflated using air."(emphasis added)

Clearly then, those techniques which were utilized to open non-tubular arrangements of the overlapped sheet material would have not only been considered relevant to the tubular configuration but would have been expected to work more effectively upon the tubular sheet material in disengaging the overlapped sheets than it worked upon the c folded sheets for example. Clearly, the reference is concerned with the disengaging of the components and whether the sheet material was in a tubular form or a c folded condition one would have been expected to understand that techniques used for the folded material for disengaging the embossments would have been useful for disengaging the embossments of an over folded sheet material which was in tubular form. Appellant's arguments to the contrary have not been found to be persuasive. Again, it should be pointed out that appellant has not addressed whether the reference to Meyer suggested the use of a closure in the bag and the means employed therein to

associate the closure means with the plastic material utilized to make the bag. As such, it is believed appellant agrees with the Office interpretation of the reference to Meyer as it relates to claim 13 and the use of a means to apply a closure to the plastic web when making a bag assembly.

Regarding the rejection of claims 1, 3, 12-16, 18 and 19 over Bustin in view of Meyer or alternatively Meyer in view of Bustin, the appellant argues again that because the independent claim is allowable that all dependent claims are likewise allowable and additionally that one cannot apply teachings of opening a folded sheet to opening a tubular plastic sheet which has been collapsed to disengage embossments therein. As noted above, neither of these arguments are persuasive. Appellant is referred to the detailed discussion of the same above. Additionally, appellant is advised as expressed in the FINAL rejection, that the reference to Meyer clearly formed a "strainable network" with the embossing operation. It being noted that appellant themselves incorporated the reference to Meyer by reference for this specific teaching. As such, even if Bustin did not necessarily form the same as a function of embossing operation in the converting of a film to a bag, the reference to Meyer clearly expressed the desirability of forming the same "strainable network" as claimed employing the embossing operation (like that of Bustin). Appellant's argument that reversal of the order of references makes no difference is not persuasive for this reason. Clearly in bag manufacture, one skilled in the art would have desired to emboss in order to provide the film material with elastic-like behavior wherein the resulting material had a "strainable network". Appellant does not dispute this teaching in Meyer and its usefulness when taken in light of the

embossing in Bustin. Claims 1, 3, 12-16, 18 and 19 stand rejected over these references and the rejection should be sustained for the reasons presented. It should be noted that one employing the disengaging techniques of Bustin in Meyer would have expected success as separation of the folded sheet material subsequent to embossing was necessary in order to render the bag material useful for filling with contents therein. Additionally, one would have reasonably expected that the processing performed to form the strainable network of Meyer would have been understood to have been performed by Bustin (i.e. the necessary controlling of the embossing operation to achieve the same) in order to impart an elastic-like property to the film material and one skilled in the art would have reasonably expected success performing this operation in bag converting operations.

Regarding the rejection of claims 2, 4, 10 and 20 with the combination of Bustin and Meyers further taken with Cronauer, the appellant argues that again that the teachings of separating a flattened tube of Bustin are not applicable to the teachings of Meyer who is employing a folded sheet of material and that the reference to Cronauer adds nothing to cure the deficiency in the basic rejection. However, as addressed above, one skilled in the art would have been motivated to combine the teachings of Meyer and Bustin (at least for the reasons of opening the assembly subsequent to embossing the overlapped material in order to allow for the bag to be opened for the filling of the bag therein and additionally as noted above the reference to Meyer clearly envisioned formation of an elastic-like material for the manufacture of a bag wherein the same was formed by embossing to form a "strainable network", noting that Bustin

performed an embossing operation upon the overlapped sheet material). As such, there's no deficiency to be made up by the inclusion of Cronauer. The appellant is additionally advised as discussed above, the specific manner for introduction of the air for facilitating separation of the embossed overlapped material would certainly have included the use of an air knife structure like that of Cronauer. One would have expected success when introducing air with an air knife in the process for opening and disengaging the embossed overlapped materials.

Regarding the rejection of claims 2, 4-11, 17, 19, and 20 over Meyer , Bustin and any one of Rowe et al, LaFleur et al or Yisha et al or in view of the collective teachings of Hiramoto et al, Henaux, Adelman, and Muller appellant argues that no prima facie case has been established because each and every limitation of the claims has not been found in the prior art, namely there is no teaching that techniques used for overlapped sheet materials which were overlapped by folding prior to embossing would have been useful in the disengagement of embossments from an overlapped sheet of tubular material. As noted above, the use of the means for disengaging a c folded sheet material to form the overlap would have been understood to be useful in the disengaging of flattened tube having overlaps therein. It should be noted that appellant did not address the various disengaging means described in the references to Rowe et al, LaFleur et al, Yisha et al , Hiramoto et al, Henaux, Adelman, and Muller. As such, appellant has conceded that it would have been within the purview of the ordinary artisan to utilize the various disengaging means of these references in the operation of Bustin in order to disengage the engaged portions of material. It should be noted as

addressed above that those techniques used for an overlapped sheet of material would have been useful for the overlapped tube sheet as it was recognized to be more difficult to open the folded sheet material rather than the tube sheet as noted by appellant in the specification. Namely appellant is referred to paragraph [0004] of the specification where it states that:

"It is frequently difficult to separate the overlaying or overlapping layers of film in which deformations have been formed which can cause problems during subsequent processing. This problem is even more acute when the continuous web from which the flexible bags are made is not in a tubular configuration that can be easily inflated using air."(emphasis added)

Clearly then, those techniques which were utilized to open non-tubular arrangements of the overlapped sheet material would have not only been considered relevant to the tubular configuration but would have been expected to work more effectively upon the tubular sheet material in disengaging the overlapped sheets. One would have expected to achieve success using the same for a tubular configuration.

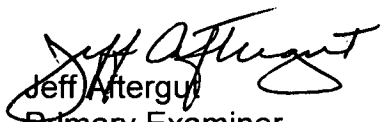
It should additionally be noted that appellant did not address the various disengaging means described in the references to Rowe et al, LaFleur et al, Yisha et al, Hiramoto et al, Henaux, Adelman, and Muller. As such, appellant has conceded that it would have been within the purview of the ordinary artisan to utilize the various disengaging means of these references in the operation of Bustin as modified by Meyer (or vice versa) in order to disengage the engaged portions of material.

(11) Related Proceeding(s) Appendix


No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


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